

Service-Anleitung  
Service Manual  
Instructions de Service

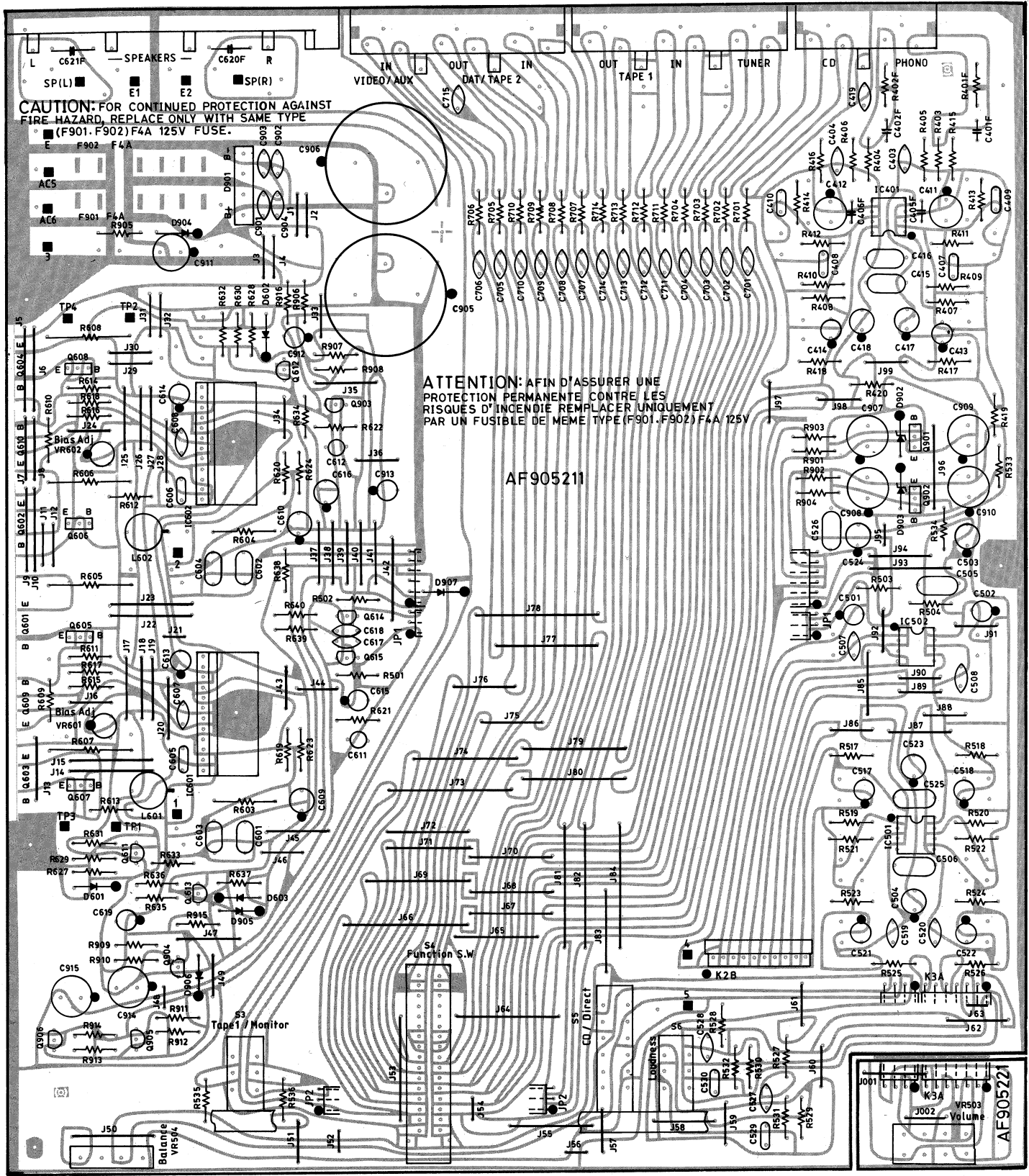
Dual

CV 5600



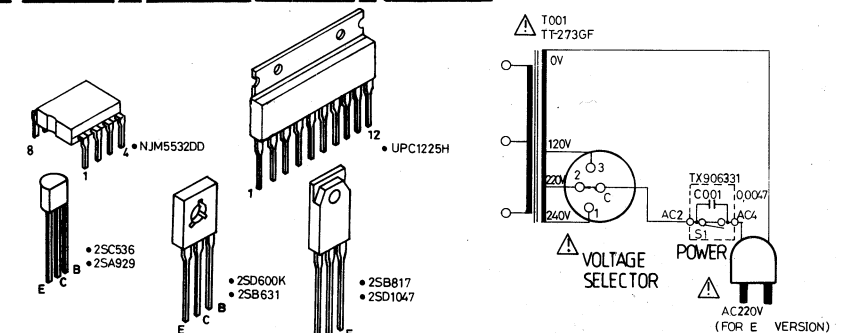
| Technische Daten<br>(typische Werte)                                                                                                      | Specifications<br>(typical values)                                                                                                                              | Caractéristiques<br>techniques<br>(valeurs types)                                                                                                                | Dati tecnici<br>(valori tipici)                                                                                                                                    | Dual CV 5600                              |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| <b>Ausgangsleistung</b><br>Sinusleistung<br>(8 Ω DIN 1 kHz)<br>Sinusleistung<br>(8 Ω IHF 20 Hz–20 kHz, 0,03 %)<br>Musikleistung (8 Ω/4 Ω) | <b>Power output</b><br>RMS continuous power output<br>(8 Ω DIN 1 kHz)<br>RMS continuous power output<br>(8 Ω IHF 20 Hz–20 kHz, 0,03 %)<br>music power (8 Ω/4 Ω) | <b>Puissance de sortie</b><br>Puissance sinus<br>(8 ohms DIN 1 kHz)<br>Puissance sinus<br>(8 ohms IHF 20 Hz–20 kHz, 0,03 %)<br>Puissance musique (8 ohms/4 ohms) | <b>Potenza d'uscita</b><br>capacità sinusoidale<br>(8 ohm DIN 1 kHz)<br>capacità sinusoidale<br>(8 ohm IHF 20 Hz–20 kHz, 0,03 %)<br>Potenza musicale (8 ohm/4 ohm) | 2×35 W<br>2×30 W<br>2×45/65 W             |
| <b>Leistungsbandbreite</b>                                                                                                                | <b>Frequency response</b>                                                                                                                                       | <b>Bande de puissance</b>                                                                                                                                        | <b>Banda di potenza</b>                                                                                                                                            | 10–60000 Hz                               |
| <b>Klirrfaktor</b><br>bei 2/3 Leistung (1 kHz)                                                                                            | <b>Harmonic distortion</b><br>at 2/3 power (1 kHz)                                                                                                              | <b>Distorsion</b><br>à 2/3 de puissance (1 kHz)                                                                                                                  | <b>Distorsione armonica</b><br>a 2/3 de rendimento (1 kHz)                                                                                                         | < 0,02 %                                  |
| <b>Fremdspannungsabstand</b><br>bezogen auf Nennleistung<br>Phono-Eingang<br>Hochpegel-Eingänge<br>(CD, VIDEO, TAPE)                      | <b>Signal/noise ratio</b><br>referred to rated power output<br>Phono input<br>High-level inputs<br>(CD, VIDEO, TAPE)                                            | <b>Rapport non pondéré son/bruit</b><br>par rapport à la puissance nominale<br>Entrée Phono<br>Entrées haut niveau<br>(CD, VIDEO, TAPE)                          | <b>Selettività</b><br>riferita alla potenza nominale<br>ingresso phono<br>ingressi ad alte impedenze<br>(CD, VIDEO, TAPE)                                          | 72 dB<br>95 dB                            |
| <b>Übersprechdämpfung</b>                                                                                                                 | <b>Crosstalk attenuation</b>                                                                                                                                    | <b>Diaphonie</b>                                                                                                                                                 | <b>Diafonia</b>                                                                                                                                                    | 75 dB                                     |
| <b>Eingänge</b><br>CD, VIDEO, TAPE<br>PHONO                                                                                               | <b>Inputs</b><br>CD, VIDEO, TAPE<br>PHONO                                                                                                                       | <b>Entrées</b><br>CD, VIDEO, TAPE<br>PHONO                                                                                                                       | <b>Ingressi</b><br>CD, VIDEO, TAPE<br>PHONO                                                                                                                        | 200 mV/47 kΩ<br>2,5 mV/47 kΩ              |
| <b>Ausgänge</b><br>Druckklemmen<br>für zwei Lautsprecherpaare<br>1-Koaxialbuchse ¼ inch<br>für Kopfhörer<br>2 TAPE, VIDEO                 | <b>Outputs</b><br>Clamping terminals<br>for two speaker pairs<br>1 coaxial jack, ¼ inch,<br>for headphones<br>2 TAPE, VIDEO                                     | <b>Sorties</b><br>Bornes à pression<br>pour deux paires de haut-parleurs<br>1 prise coaxiale ¼"<br>pour écouteurs<br>2 TAPE, VIDEO                               | <b>Uscite</b><br>morsetti di pressione<br>per due coppie di diffusori<br>1 presa coassiale ¼"<br>per cuffia<br>2 TAPE, VIDEO                                       | 8–16 Ohm                                  |
| <b>Leistungsaufnahme</b><br>(maximal)                                                                                                     | <b>Power input</b><br>(maximum)                                                                                                                                 | <b>Consommation de courant</b><br>(maximum)                                                                                                                      | <b>Potenza assorbita</b><br>(massimo)                                                                                                                              | 200 Watt                                  |
| <b>Netzspannung</b><br>Model Europa<br>Model USA/Canada<br>Model UK                                                                       | <b>Mains voltage</b><br>European model<br>US/Canadian model<br>UK model                                                                                         | <b>Voltage secteur</b><br>Modèle Europe<br>Modèle USA/Canada<br>Modèle Royaume-Uni                                                                               | <b>Tensione di rete</b><br>modello Europa<br>modello Stati Uniti/Canada<br>modello GB                                                                              | 220 V/50 Hz<br>120 V/60 Hz<br>240 V/50 Hz |
| <b>Maße</b><br>(Breite×Höhe×Tiefe)                                                                                                        | <b>Dimensions</b><br>(width×height×depth)                                                                                                                       | <b>Dimensions</b><br>(largeur×hauteur×profondeur)                                                                                                                | <b>Dimensioni</b><br>(larghezza×altezza×profondità)                                                                                                                | 440×92×303 mm                             |

Grundplatte  
Mainboard P.C.B.  
Platine principale



[illegible]

- 1). USE ONLY REPLACEMENT PARTS THAT HAVE THE CRITICAL CHARACTERISTICS RECOMMENDED BY MANUFACTURER.
- 2). MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE AC SUPPLY CIRCUIT BEFORE RETURNING THE UNIT TO THE CUSTOMER.

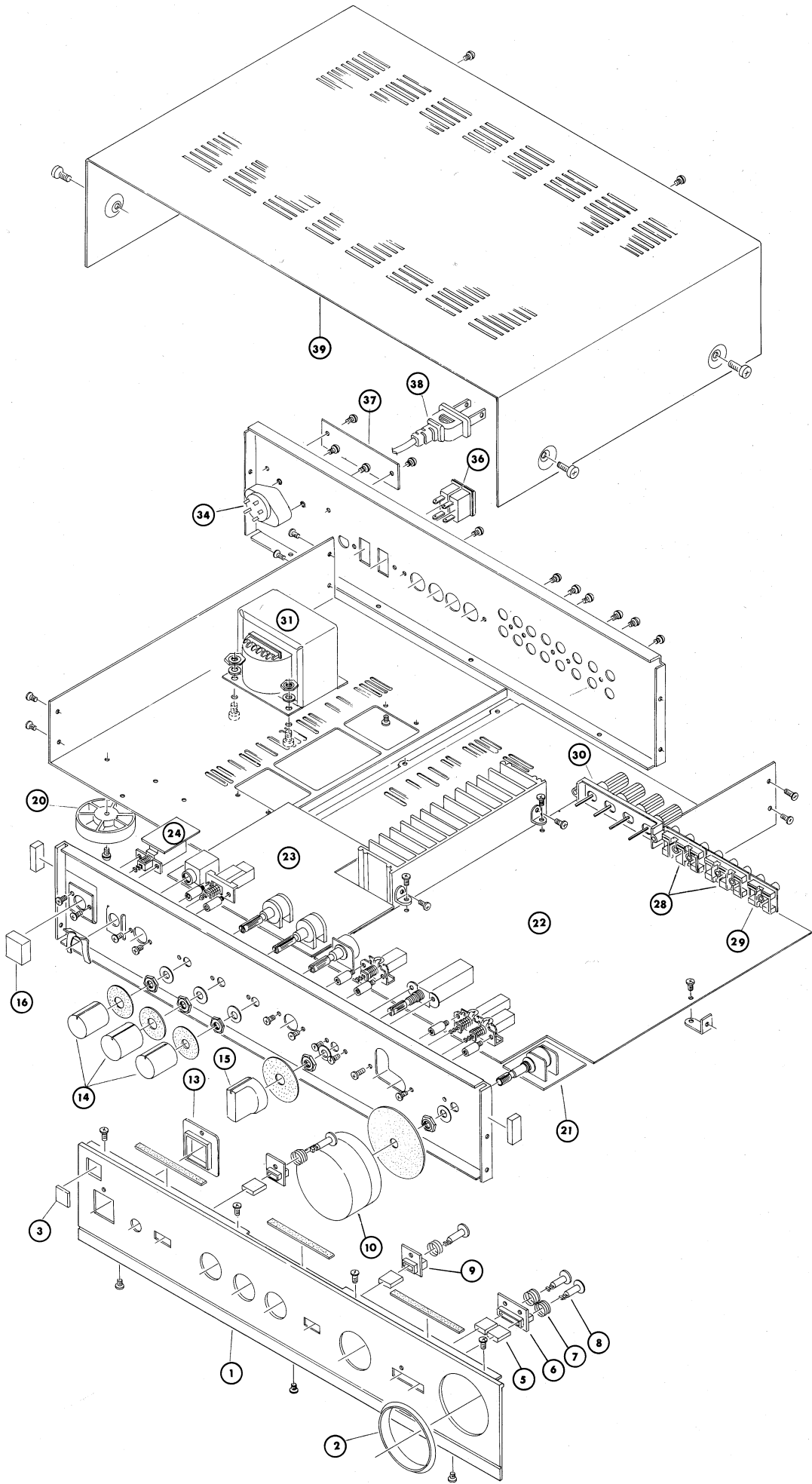


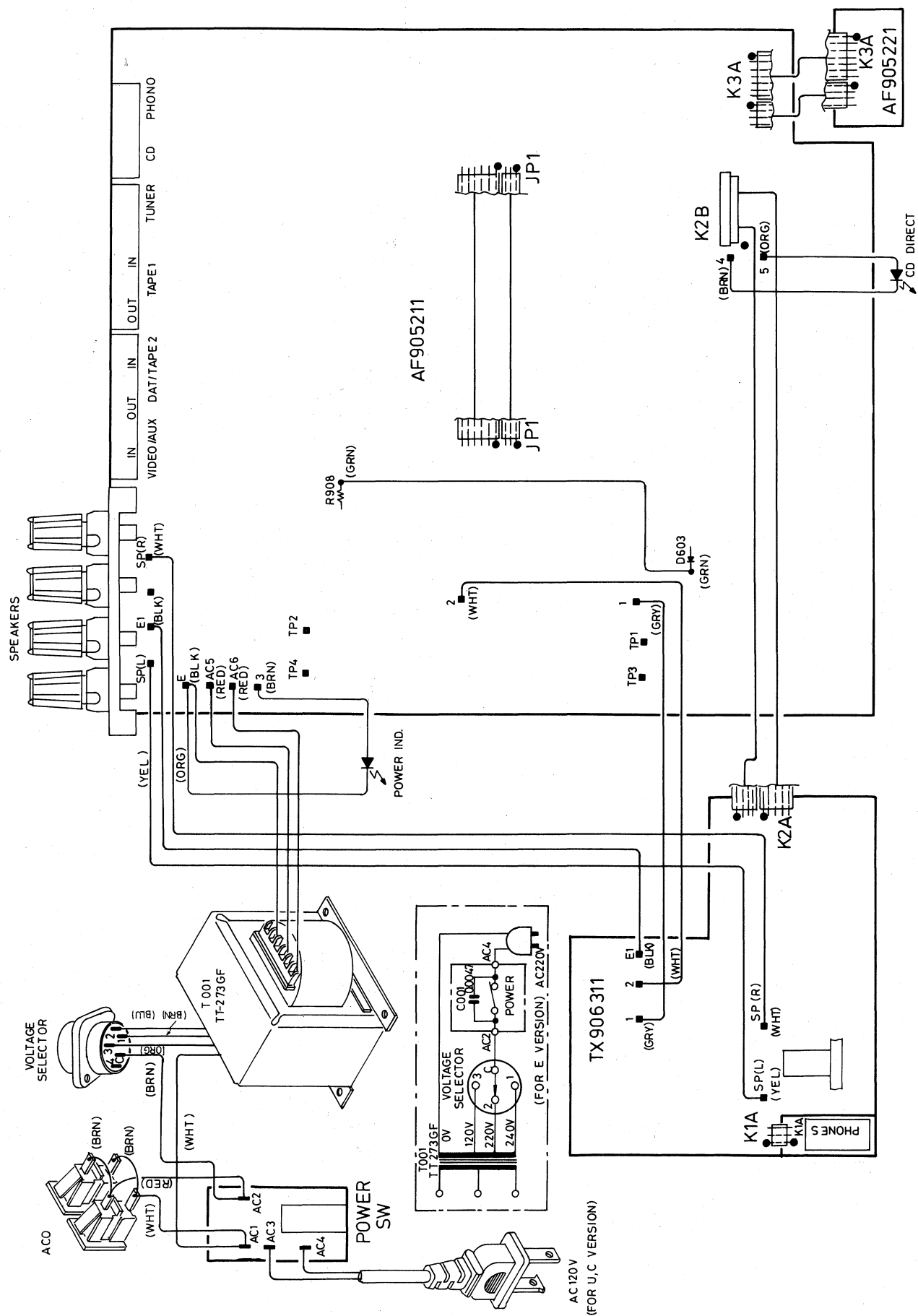
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- The diagram illustrates the internal architecture of the TMS320C49, organized into four main functional stages:
- PRE-AMP Stage:** Contains the **Differential AMP** and **Current Mirror Load**. It receives **Non-Inverted Input** (pin 4) and **Inverted Input** (pin 5). It is powered by **VCCP (PRE-AMP Stage)** (pin 2) and **MUTING** (pin 3).
  - Phase Compensation:** Contains the **Protection Circuit**. It receives input from the **Current Mirror Load** and provides output to the **Pre-Driver**.
  - Bias:** Contains the **Constant Current Load** and **Temperature Compensation** block. It receives input from the **Reference Bias** and provides output to the **Pre-Driver** and **Driver Stage**.
  - Driver Stage:** Contains the **Driver Stage** block. It receives input from the **Pre-Driver** and provides output to the **Power Driver + Output** (pin 12) and **Power Driver - Output** (pin 11). It is powered by **VCCD (Driver Stage)** (pin 1).
- Other components and connections include:
- Reference Bias:** Receives input from the **MUTING** pin (3) and provides output to the **Constant Current Load** and **Temperature Compensation** block.
  - Pre-Driver:** Receives input from the **Current Mirror Load** and **Protection Circuit**, and provides output to the **Driver Stage**.
  - Temperature Compensation:** Receives input from the **Constant Current Load** and provides output to the **Driver Stage**.
  - Pin 10:** Labeled **Driver Stage**, it is a common output point for the **Power Driver + Output** and **Power Driver - Output**.

| Pos.   | Art.-Nr. | Bezeichnung                     |
|--------|----------|---------------------------------|
| 1      | 284 459  | Frontblende                     |
| 2      | 284 452  | Ring                            |
| 3      | 283 750  | Dual-Zeichen                    |
| 5      | 284 488  | Taste                           |
| 6      | 284 449  | Tastenführung                   |
| 7      | 284 880  | Druckfeder                      |
| 8      | 284 515  | Tastenverlängerung              |
| 9      | 284 557  | Tastenführung                   |
| 10     | 284 446  | Drehknopf                       |
| 13     | 284 487  | Tastenführung                   |
| 14     | 281 972  | Drehknopf                       |
| 15     | 284 447  | Drehknopf                       |
| 16     | 284 448  | Knopf                           |
| 20     | 284 460  | Fuß                             |
| 21     | 284 594  | Steller 100 K×2 (Volume) VR 503 |
| 24     | 281 999  | Netzschalter S1                 |
| 25     | 283 743  | Kopfhörerbuchse                 |
| 28     | 284 613  | Cinchbuchse 3-fach              |
| 29     | 284 614  | Cinchbuchse 2-fach G            |
| 30     | 284 450  | Lautsprecherklemmen             |
| 31     | 284 609  | Netztrafo                       |
| 34     | 283 748  | Spannungswahlschalter           |
| 36     | 281 992  | Anschlußbuchse AC               |
| 38     | 243 750  | Netzkabel Europa                |
| 39     | 284 883  | Gehäuseblech                    |
| 22     |          | <b>Grundplatte</b>              |
| IC 401 | 284 617  | IC NJM 5532                     |
| IC 501 | 284 617  | IC NJM 5532                     |
| IC 502 | 284 617  | IC NJM 5532                     |
| VR 504 | 284 593  | Steller 250 K                   |
| S 3    | 284 620  | Schalter 1-fach                 |
| S 4    | 284 596  | Drehschalter                    |
| S 5    | 284 595  | Schalter 2-fach                 |
| S 6    | 284 595  | Schalter 2-fach                 |
| IC 601 | 274 956  | IC UPC 1225 H                   |
| IC 602 | 274 956  | IC UPC 1225 H                   |
| L 601  | 284 456  | Spule                           |
| L 602  | 284 456  | Spule                           |
| D 601  | 282 021  | Diode 1 N 4003                  |
| bis    |          |                                 |
| D 603  | 282 021  | Diode 1 N 4003                  |

| Pos.      | Art.-Nr. | Bezeichnung               |
|-----------|----------|---------------------------|
| Q 601     | 282 005  | Transistor 2 SB 817       |
| Q 602     | 282 005  | Transistor 2 SB 817       |
| Q 603     | 282 004  | Transistor 2 SD 1047      |
| Q 604     | 282 00   | Transistor 2 SD 1047      |
| Q 605     | 282 003  | Transistor 2 SB 631       |
| Q 606     | 282 003  | Transistor 2 SB 631       |
| Q 607     | 282 002  | Transistor 2 SD 600       |
| bis       |          |                           |
| Q 610     | 282 002  | Transistor 2 SD 600       |
| Q 611     | 269 092  | Transistor 2 SC 536       |
| Q 612     | 269 092  | Transistor 2 SC 536       |
| Q 613     | 284 578  | Transistor 2 SA 929       |
| Q 614     | 269 092  | Transistor 2 SC 536       |
| Q 615     | 269 092  | Transistor 2 SC 536       |
| D 901     | 284 592  | Gleichrichter KBL 02      |
| D 902     | 284 504  | Diode RD 18 E             |
| D 903     | 284 504  | Diode RD 18 E             |
| D 904     | 282 021  | Diode 1 N 4003            |
| D 905     | 223 906  | Diode 1 N 4148            |
| D 906     | 282 021  | Diode 1 N 4003            |
| D 907     | 282 021  | Diode 1 N 4003            |
| Q 901     | 282 002  | Transistor 2 SD 600       |
| Q 902     | 282 003  | Transistor 2 SB 631       |
| Q 903     | 269 092  | Transistor 2 SC 536       |
| bis       |          |                           |
| Q 905     | 269 092  | Transistor 2 SC 536       |
| Q 906     | 284 578  | Transistor 2 SA 929       |
| C 905     | 284 546  | Elyt-Kond. 6800 UF / 50 V |
| C 906     | 284 546  | Elyt-Kond. 6800 UF / 50 V |
|           | 284 450  | Lautsprecherklemme        |
|           | 284 614  | Cinchbuchse 2-fach G      |
|           | 284 613  | Cinchbuchse 3-fach        |
| LED ON/CD | 281 997  | LED LTL 2201 A rot        |
| 23        |          | <b>Klangstellerplatte</b> |
| VR 501    | 282 011  | Steller 20 K              |
| VR 502    | 282 011  | Steller 20 K              |
| S 2       | 284 612  | Schalter (Speaker)        |
|           | 284 662  | Faltschachtel             |
|           | 284 790  | Styroporeinlage           |
|           | 283 582  | Bedienungsanleitung       |

Änderungen vorbehalten! Subject to change! Sous réserve de modification!





| Signalquelle<br>Signal source | Einstellung Signalquelle<br>Signal source adjustment | Einstellung Gerät<br>Unit adjustment                                                                                                                              | Anzeigegerät Anschluß<br>Indicator connection | Abgleichposition<br>Adjustment position | Abgleich, Bemerkung<br>Alignment, Remarks |
|-------------------------------|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------|-------------------------------------------|
| Ruhestrom · Quiescent Current |                                                      |                                                                                                                                                                   |                                               |                                         |                                           |
|                               |                                                      | Power: On<br>Volume: Minimum<br>Speaker: On<br>Speaker: 8 Ω<br>Lastwiderstand<br>Load resistor<br>Gerät 4 Minuten<br>warmlaufen lassen<br>Wait about<br>4 minutes | DC-Voltmeter<br>an/to<br>TP 1-TP3<br>TP 2-TP4 | VR 601<br>VR 602                        | 4 mV<br>4 mV                              |

